

Amendments to the Claims:

Claims 1-11 (CANCELLED)

12. (New) A carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material.

13. (New) A carbon heating element according to claim 12, wherein the carbon is obtained by firing organic substances.

14. (New) A carbon heating element according to claim 12, further comprising carbon powder acting as a good conductor.

15. (New) A carbon heating element according to claim 12, wherein the carbon heating element has a rectangular cross section.

16. (New) A carbon heating element according to claim 12, wherein the carbon heating element is enclosed in a vessel filled with an inert gas.

17. (New) A carbon heating element according to claim 12, wherein the carbon heating element has a specific resistance of about 4.5 to about $7.5 \times 10^{-3} \Omega \cdot \text{cm}$.

18. (New) A carbon heating element according to claim 12, wherein the carbon heating element has a specific resistance of about $4.5 \times 10^{-3} \Omega \cdot \text{cm}$.

19. (New) A carbon heating element according to claim 12, wherein the carbon heating element has a specific resistance of about $7.5 \times 10^{-3} \Omega \cdot \text{cm}$.

20. (New) A carbon heating element according to claim 12, wherein the carbon heating element has a specific resistance of about $0.3 \times 10^{-3} \Omega \cdot \text{cm}$.

21. (New) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about 4.5 to about $7.5 \times 10^{-3} \Omega \cdot \text{cm}$.

22. (New) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about $4.5 \times 10^{-3} \Omega \cdot \text{cm}$.
23. (New) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about $7.5 \times 10^{-3} \Omega \cdot \text{cm}$.
24. (New) A carbon heating element comprising carbon acting as a good conductor and a metal or a metalliod compound acting as a conductivity-inhibiting material, wherein the carbon heating element has a rectangular cross section.
25. (New) A carbon heating element according to claim 24, wherein the carbon heating element is enclosed in a vessel filled with an inert gas.
26. (New) A method of making a carbon heating element, comprising:
forming a carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material, wherein said carbon is obtained by firing organic substances.
27. (New) A method of making a carbon heating element according to claim 26, wherein the organic substances yield carbonization of at least 5% after firing.
28. (New) A method of making a carbon heating element according to claim 26, wherein the organic substances comprise polyvinyl chloride and furan resin.